

ABSTRACT

DEVELOPMENT MIG WELDING HANDOUT FOR LEARNING PROCESS AT SMK NEGERI 2 WONOSARI

by

Danar Hardianto Dwi Cahyo
NIM. 08503244021

This study aims determining the form of handouts MIG welding for learning process at SMK Negeri 2 Wonosari. Furthermore this study was aimed to determine the feasibility of handouts that have been made to study welding with MIG welding process in SMK Negeri 2 Wonosari.

The method used in this study was a research & development with the before-after experimental design. The study was conducted at SMK Negeri 2 Wonosari in class XI student LS Welding Engineering Department. Data collection techniques in this study using questionnaires and documentation of the purpose of determining eligibility handout.

The results of this study was finding the ideal form of MIG welding handout. Based on the results of the validation and improvement of the design / shape, gained 12 handout welding with MIG welding process. Form arrangement of the handout that was developed, namely (1) cover / covers, (2) handouts and at the end of each handout there were exercises and a bibliography. After going through the validation of the design and improvement of handouts design welding with MIG welding process developed declared fit for use and used as a source of learning. It can be seen from the assessment given by the material and media experts who each earn a percentage of 75% and 86.9%. On testing the feasibility of a function obtained judgments totaling 89.2%. To find the effective use of handouts on student achievement test conducted t. Results of testing compared with t-table ($11.716 > 2.000$). Calculations show that t count bigger than t table. Then there was an increase in student achievement. Based on the results obtained with the handout of learning welding MIG welding process can be used as a source of learning to support learning in subjects welding with MIG welding process at SMK Negeri 2 Wonosari.

Key words: Handout, research development, MIG welding, SMK N 2 Wonosari